## REMARKS

Claims 1-18 are pending. No new matter has been added by way of the present amendments. For instance, newly added claim 7 is supported by the present justification at page 5, lines 18-21. Newly added claims 8-11 are supported by originally filed claims 2-5, respectively, as well as the present specification at page 4, lines 8-12. Newly added claim 12 is supported by originally filed claim 6 as well as the present specification at page 4, lines 13-19. Newly added claim 13 is supported by the present specification at page 3, line 37 and page 5, lines 30-33. New claims 14-17 are supported by originally filed claims 2-5, respectively, as well as the present specification at page 4, lines 8-12. Lastly, newly added claim 18 is supported by originally filed claim 6 as well as the present specification at page 4, lines 13-19. Accordingly, no new matter has been added.

In view of the following remarks, Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

### Issues under 35 U.S.C. §102(b)

The Examiner has rejected claims 1 and 6 under 35 U.S.C. §102(b) as being anticipated by Bozler et al., USP 4,619,894 (hereafter referred to Bozler '894). Applicants respectfully traverse.

Bozler '894 discloses a process for forming a selected pattern on the surface of a substrate, comprising:

(a) forming on said substrate a substantially etchable, low ohmic resistivity cermet (a ceramic metal material) layer of aluminum and $A1_2O_3$ by depositing aluminum on said substrate in an oxygen environment;

(b) heating selected regions of said cermet layer by exposing such selected regions to radiant energy to selectively transform said exposed regions from said substantially etchable low ohmic resistivity material to substantially less-etchable material higher ohmic resistivity; and

(c) removing the unexposed regions to form a pattern of less etchable higher ohmic resistivity material on said substrate surface." See claim 1 of Bozler '894.

In the process of Bozler '894, a selected pattern is formed on the surface of a semiconductor substrate (wafer), and the pattern is made by heating selected regions of the cermet layer through exposure to radiant energy. Bozler '894 also disclose that the cermet layer is a solid-transformation resist. Accordingly, the process of Bozler '894 is a lithography technique. Bozler '894 fails to disclose either transparency of the substrate or a light-shield effect of the film. The substrate having the cermet layer in Bozler '894 is not a photomask blank.

On the other hand, the method of the present invention according to claim 1 is a method of manufacturing a photomask blank. The Examiner's attention is drawn to the fact that the manufacturing of a photomask blank does not include a patterning process. Thus, the technical field of the present invention and the present claims differ from Bozler '894. Accordingly, there is no anticipation based upon Bozler '894. Reconsideration and withdrawal of this rejection are respectfully requested.

**Issues under 35 U.S.C. §103(a)**

The Examiner has rejected claims 1-6 under 35 U.S.C. §103(a) as being obvious over Sato et al., USP 6,806,021 (hereafter referred to as Sato '021) in view of Bozler '894. Applicants respectfully traverse.

Sato '021 discloses a multi-layer resist process for manufacturing a semiconductor device. Sato '021 fails to disclose a photomask blank. In the process of Sato '021, the silicon oxide-like film (an intermediate film) is an etching mask to dry-etch the working film and the coating is irradiated with an energy beam (etching mask precursor). An etching mask is used for protecting etching plasma and an etching mask is different from the film of the present invention for phase-shifting, light-shielding or antireflection. Thus, the technical field of the present invention differs from the process of Sato '021.

Accordingly, deficiencies exist between the present invention and the disclosure of Sato '021. These deficiencies cannot be cured by the secondary reference of Bozler '894. Moreover, exposing to radiant energy in the process of Bozler '894 is for solid transformation, and the energy beam irradiation in the process of Sato '021 is for replacing nitrogen in the coating (etching mask precursor) with oxygen to densify the etching mask. On the other hand, the light irradiation of the present invention is for chemical resistance improvement and stress reduction. The object of the light irradiation of the present invention is thus, different from the objects of the cited references. In summary, even when the two references of Sato '021 and Bozler '894 are taken in combination, there exists no *prima facie* case of obviousness to arrive at the present invention. Accordingly, the Examiner is respectively requested to withdraw this rejection.

In view of the above, Applicants respectfully submit that the present claims relate to patentable subject matter. Accordingly, the Examiner is respectfully requested to withdraw all rejections and allow the currently pending claims.

If the Examiner has any questions or comments, please contact Craig A. McRobbie, Registration No 42,874 at the offices of Birch, Stewart, Kolasch & Birch, LLP.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

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Respectfully submitted,

By _____ #42,874

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